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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/013,091

12/07/2001

Bahman Zargham

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EXAMINER

NGUYEN, MERILYN P

ART UNIT

PAPER NUMBER

2163

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/21/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/013,091

Applicant(s)

ZARGHAM ET AL.

Examiner

Merilyn P. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/08/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-20 and 22-27 is/are rejected.
- 7) ☒ Claim(s) 3 and 21 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Detailed Action.

### DETAILED ACTION

1. In response to the communication dated 12/08/2006, claims 1-27 are pending in this office action.
2. This application claims priority from Provisional Application number 60285640 filed on 04/19/2001.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 5-8, 10-13, 15-16, and 19-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Stewart (US 2002/0013759).

Regarding claims 1, 11 and 15, Stewart discloses a method, a system, and a computer readable medium embodying computer program code configured to cause a computer to perform steps for providing enriched publish and subscribe in an enterprise (See Figs 12-13, 21-23 and 26, and page 15, paragraphs [0233-0234], and pages 18-19, paragraphs [0303-0305]) running as a zero latency enterprise (ZLE) (See page 19, paragraph [0312]), the enterprise experiencing a plurality of events occurring in association with business transactions conducted at a plurality of

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sites across the enterprise (See page 13, paragraph [0196] and page 19, paragraph [0305]), the method comprising:

initiating, in real time, a process responsive to an event (See page 10, paragraph [0124], event corresponding to collaborations of trading partners for discussion or conversation related to business transactions), the process including

- publishing to a central repository one or more messages prompted by that event containing information from that event (See page 10, paragraph [0124], lines 6-7), respective information from the plurality of events being aggregated in the central repository (See page 13, paragraph [0201], [0139], [0150]) where the aggregated information can, in real-time, be accessible and available for extraction and analysis from across the enterprise, [0227], lines 11-14, and [0279]),
- updating the aggregated information with information from the published messages (See [0280]),
- creating enriched messages by enriching the messages with information from that event and/or corresponding information extracted from the central repository (See [0227-0228]), and
- subscribing to the enriched new messages (See [0233-0234]).

Regarding claims 2 and 12, Stewart discloses wherein the central repository operates as an information broker between applications such that applications publish messages to the

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central repository and subscribe to messages from the central, rather than exchange request-response messages directly with each other (See [0214-0216] and [0223]).

Regarding claims 5 and 20, Stewart discloses predefining a schema for each of the applications, the schema identifying which of the plurality of events and types of data changes its respective application is interested in, the schema further identifying any information its respective application needs for performing tasks related to such events (See page 11, paragraphs [0137-0138], and page 18, paragraph [0282] to page 19, paragraph [0305]); and storing each schema in the central repository for later use in enriching the new messages (See page 11, paragraph [0137], lines 6-12).

Regarding claim 6, Stewart discloses wherein the applications cause the updating of aggregated information at the central repository upon a change of information in their environment (See page 14, paragraph [0219-0220]).

Regarding claim 7, Stewart discloses wherein the published messages and subscribed messages are formatted in XML (See [0233-0234]).

Regarding claims 8 and 13, Stewart discloses wherein the central repository is based on a database which can be updated with information from new events while being queried and which can send the enriched messages to multiple subscribers, thereby leveraging an innate parallelism, scalability and reliability of the database (See paragraphs [0137-0139]).

Regarding claim 10, Stewart discloses wherein the enriched new messages to which an application subscribes can include extracted information that was previously published to the central repository by other one or more applications (See page 15, paragraphs [0227-0228]).

Regarding claim 16, Stewart disclose a system for enriched publish and subscribe operations associated with business transactions conducted by an enterprise running as a zero latency enterprise (ZLE), the system being implemented in a ZLE framework (See Figs 1-3) and comprising:

- one or more applications via which the business transactions are conducted (See 106, 108, 110, 112, 114, Fig. 1); and
- an operational data store (ODS) (Hub 132, Fig. 3), the ODS being operatively communicative with the one or more applications such that the applications are capable to publish messages to and subscribe to messages from the ODS (See page 7, paragraph [0089] to page 8, paragraph [0113]), the ODS being configured
  - to operate as a dynamic central repository that consolidates information from across the enterprise (See page 12, paragraph [0150]) and supports business transactional access to real time information from any of the one or more applications (See page 13, paragraphs [0201], [0206]),
  - to know what particular information any one of the applications needs in order to accomplish its task (See page 13, paragraph [0198]), the particular

information enriching messages to which the applications subscribe (See page 13, paragraph [0206]), and

- to update the consolidated information with information from messages published by the applications [See page 13, paragraph [0202], and page 18, paragraph [0279, 0280]].

Regarding claim 19, Stewart discloses wherein the particular information for enriching messages subscribed to by an application can be information previously published by another application (See [0226-0227]).

Regarding claim 22, Stewart discloses further discloses an inference-based rules engine that finds an appropriate business rule, regardless of the complexity of rules or the size of any rules set, the inference-based rules engine facilitating a rules service that integrates the rules and policies of the enterprise in the ODS (See page 6, paragraph [0073] and page 9, paragraphs [0117] and [0120]); and a process-flow engine that manages a flow of the business transactions, processes, and messages between the applications integrated via the ZLE framework (Work Flow Server 104, Fig. 1, and [0081] and [0139]).

Regarding claim 23, Stewart discloses providing personalized feedback and/or customized offers in real time to a customer while a customer is still engaged (See paragraph [0083]).

Regarding claim 24, Steward discloses where the corresponding information is mined and/or analyzed in real time (See paragraph [0059]).

Regarding claim 25, Steward discloses wherein the ZLE virtual hub includes a plurality of applications for performing information mining and/or analysis(See paragraph [0059]).

Regarding claim 26, Steward discloses wherein the ZLE virtual hub includes a plurality of technology adapters for loosely coupling applications to and logically arranging applications around the ZLE virtual hub (See page 7, paragraph [0089] to page 8, paragraph [0113]).

Regarding claim 27, Steward discloses wherein a plurality of applications for performing information mining and/or analysis, are loosely coupled to the ZLE virtual hub via said technology adapters (See Fig. 6).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US 2002/0013759), in view of Schmidt (US 2002/0026630).



Regarding claim 4, Stewart discloses all the claimed subject matter as set forth above in claim 1. However, Stewart is silent as to wherein the central repository provides a coherent view, in real time, of the aggregated information from across the enterprise, the process being founded on the coherent view of the aggregated information. On the other hand, Schmidt teaches an integrated view of the aggregated information from across the enterprise (See page 9, paragraph [0253], [0288], Schmidt et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate a coherent view of Schmidt to the aggregated information of Stewart. The motivation would have been providing browsing for desired information.

Regarding claim 18, Stewart/Schmidt discloses wherein the consolidated information can, in real-time, be accessible and available for extraction and analysis from across the enterprise (See [0150], [0227], lines 11-14, and [0279], Stewart et al.), the ODS providing for a coherent view of the consolidated information, in real time, from across the enterprise as addressed above in claim 4.

5. Claims 9, 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stewart (US 2002/0013759), in view of Chandra (US 6,058,389).

Regarding claims 9 and 14, Stewart discloses all the claimed subject matter as set forth above. However, Stewart is silent as to wherein the central repository includes relational database management functionality that caches and queues the published and subscribed messages. On the other hand, Chandra teaches relational database management functionality that

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caches and queues the published and subscribed messages (See col. 4, lines 6-16, and col. 35, lines 15-67, Chandra et al.). It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have a relational database management functionality that caches and queues the published and subscribed messages as suggested by Chandra. The motivation would have been to store published and subscribed messages in a predetermined order so that messages would be easily managed, queried, or handled in later time.

Regarding claim 17, Stewart/ Chandra discloses wherein the ODS is configured with a cluster-aware relational database management (RDBMS) functionality that is capable of handling periodic queries (See col. 35, lines, 20-21, Chandra et al.), message queueing and store state engine operations (See col. 35, lines 30-48, Chandra et al.), and handling transactions, including insertion, updating and deletion of transactions (See col. 3, lines 40-67, Chandra et al.).

#### ***Allowable Subject Matter***

6. Claims 3 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

7. Applicant's arguments filed 12/08/2006 have been fully considered but they are not persuasive.

Applicant argue that Stewart does not teach “information from the plurality of events being aggregated in the central repository where the aggregated information can, in real-time, be accessible and available for extraction and analysis from across enterprise”. The Examiner

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respectfully disagrees. Page 11, paragraphs [0201], [0139], [0150] and page 20, claim 11 clearly teach this limitation as to the central repository is used to stored conversation management data wherein the conversation includes a plurality of messages passed between two or more participants (page 20, claim 13), wherein the conversation management data is extracted from the repository (See page 15, paragraph [0227], line 11-12) and is analyzed (See page 15, paragraph [0027], lines 12-14).

### ***Conclusion***

**8. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

**9.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marilyn P Nguyen whose telephone number is 571-272-4026.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



MN

March 19, 2007



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